

First nesting of Northern Crested Caracara *Caracara cheriway* in Belize, Central America

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Northern Crested Caracara *Caracara cheriway* is common throughout most of its range from the extreme southern USA to northern South America, but is rare or absent in much of Guatemala, southern Mexico and Belize (Howell & Webb 1995, Morrison 1996, Ferguson-Lees & Christie 2001). There is one record from Petén, Guatemala, and a few from south-east Guatemala (Eisermann & Avendaño 2007) but none in Quintana Roo, Mexico, in the southernmost Yucatán Peninsula, although there are four records in the state of Yucatán within 15 km of the Quintana Roo border (Chablé-Santos *et al.* 2007; B. MacKinnon pers. comm.). In Belize, there have been nine confirmed records in four districts (Orange Walk, Belize, Cayo and Toledo) but no breeding records (Jones *et al.* 2002, Jones 2005). The nearest known breeding is in the north-west Yucatán Peninsula and the Pacific lowlands of Guatemala, which are both >400 km away (Howell & Webb 1995). Here we present the first nesting record of Northern Crested Caracara in Belize (Jones & Komar 2009).

Results

On 25 April 2008, PB and Rudi Burgos found a stick nest in the crown of a cohune palm *Orbignya cohune* (Arecaceae) containing two nearly fledged *Caracara cheriway* chicks on the Tiger Run Farm, Cayo District, west of Central Farm. The nest tree's diameter at breast height was 42 cm and it was in a large active cattle pasture of c.3 km². PB examined other cohune palms in close proximity for alternate nests and located a large stick nest in one that was 61 m from the nest tree, suggesting that there might have been a nesting attempt prior to 2008. The active nest was re-checked on 18 May 2008 by PB, but the chicks had fledged and were absent. PB was told by the landowner, Escander Bedran, that the nestlings had fledged one week earlier on c.12 May. Considering that incubation in this species lasts c.30 days and fledging occurs at c.8 weeks (Dickinson & Arnold 1996, Rivera-Rodríguez & Rodríguez-Estrella 1998, Nemeth & Morrison 2002), we estimated that the eggs were laid on c.11 February 2008.

On 21 February 2009, DR observed an adult carrying food into the 2008 alternate nest tree, which had evident white wash. At least one nestling was observed wing flapping and stretching, which behaviour indicates imminent fledging in most raptors (Boal 1994). On 25 February 2009, RP observed two adults and a recently fledged juvenile, in very fresh plumage, on a snag 35 m from the 2009 nest tree, and a second fledgling was seen a few days later. It was estimated that the eggs were laid around 2 December 2008.

Direct feeding observations and prey remains found in the vicinity of the nest trees in 2008–09 consisted primarily of unknown snakes, as well as a Cattle Egret *Bubulcus ibis*, an unidentified rat and turtles. It could not be determined if they were preyed upon or scavenged.

Discussion

This breeding range extension of >400 km could be a result of either deforestation, the presence of more field observers in Belize, or the relative lack of field observers in the Yucatán and Petén. Until there are more observers in these areas it is difficult to quantify

if the caracara's range is expanding. However, this pair nested in an area converted from lowland broadleaf forest to cattle pasture, suggesting a response to deforestation. Historically, suitable habitat did not exist in Belize as broadleaf forest and savanna covered most of the country, whereas Northern Crested Caracara inhabits drier open country (Morrison 1996). Currently, over 30% of the natural vegetation has been lost creating corridors with other countries and suitable breeding habitat for caracaras (Miller & Miller 1998). However, conversion of forest to rice fields and human settlements could negatively impact nesting, whereas improved pastures, scattered trees and low abundance of cattle would better facilitate breeding (Morrison & Humphrey 2001).

In Belize, there are four distinct corridors surrounded by large tracts of contiguous forest that have been deforested, and all of the confirmed records of caracaras in Belize are from close to these corridors. The four areas are in Toledo District in southern Belize, Cayo District in central Belize, and two in Orange Walk District in northern Belize. Of the latter, one runs from north-west Orange Walk through Blue Creek Village and the other through northern Orange Walk. Historically, these areas consisted of broadleaf forest, but they have been cleared for roads, cattle pastures, rice fields or urbanisation. As deforestation continues, more corridors and habitat will be created for dispersing caracaras. Given the mountain barrier in Guatemala between the Pacific lowlands and Belize, the most plausible source population for Belize is the Yucatán Peninsula.

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